Career Fact Sheet

Engineering Technician

Related Job Titles:

Physical science technician, data technician, engineering aid, **aerospace** engineering technician, architecture technician, biomedical technician, chemical engineering technician, civil engineering technician, electrical engineering technician, materials engineering technician

Job Description:

Engineering technicians use science, math and **engineering** to solve technical problems. Most assist **engineers** and scientists by setting up or installing equipment, testing, maintaining and repairing equipment, conducting experiments, recording results, writing design plans and running tests. Technicians also gather data from various sources such as field notes, design books and lab reports, look at the data and report any errors or data that do not fit with the rest. **Engineering** technicians usually work in a **laboratory**, office or construction site. They spend a lot of time on the computer recording data, writing reports and writing design plans.

Interests / Abilities:

- Do you enjoy math and science?
- Are you good at math?
- Do you like to solve problems?
- Are you interested in how things work?
- Do you like working with computers?
- Are you good at working with a team?
- Do you express yourself well when writing?

Suggested School Subjects / Courses:

- Mathematics (**algebra**, **trigonometry**)
- Science
- Computers

Education / Training Needed:

At least two years of specialized training in computer **hardware** or **engineering** technology is required to be a technician. This training may be earned at an **institute**, **vocational school**, **community** or **junior college,** or from work experience. It is helpful to have some experience from internships or summer jobs in laboratories.

Areas of expertise:

- ***Electronics***: help design and lead the production of electrical and electronic equipment such as radar, sonar, navigation equipment and other instruments
- ***Engineering drafting***: use **graphics** to show designs of products before they are built
- ***Construction***: oversee the construction or repair of structures or facilities
- ***Cartography***: create and edit maps and charts.
- ***Equipment***: test and maintain equipment

Additional Resources:

- Order NASA career videos such as "Engineers: Turning Ideas into Reality," "Careers: Aerospace Engineer" or "Reaching for the Stars" from NASA CORE.
  http://core.nasa.gov
- Robotics Education
  http://robotics.arc.nasa.gov
- Junior Engineering Technical Society
  http://www.asee.org/jets
- Accreditation Board for Engineering and Technology, Inc.
  http://www.abet.org
- American Institute of Aeronautics and Astronautics
  http://www.aiaa.org
- Institute of Electrical and Electronics Engineers
  http://www.ieee.org

What can I do right now?

- Participate in Bot-Ball or FIRST Robotics competitions (see Robotics Education http://robotics.arc.nasa.gov).
- Take as many math and science classes as you can.
- Participate in National Engineers Week.
- Participate in science fair projects.
- Visit Astro-Venture regularly to participate in chats and activities.
- Call the American Association of Science and Technology Centers for information on science museums in your area that you might visit. (202) 783-7200
- Order activity books, poster sets and **engineering** kits by writing to the Society of Manufacturing Engineers, One SME Drive, P.O. Box 930, Dearborn, MI 48121-0930.